

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|  |  |   |
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| Applicant's or agent's file reference<br>000687-0009 (f.27951)   | <b>FOR FURTHER ACTION</b>                                | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No.<br>PCT/CA01/01550  | International filing date (day/month/year)<br>02/11/2001 | Priority date (day/month/year)<br>03/11/2000  |
| International Patent Classification (IPC) or national classification and IPC<br>D21C9/00   |  |   |
| Applicant<br>KEMESTRIE INC.  |  |   |
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 2 sheets.</p>   |  |   |
| <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the report</li> <li>II    <input type="checkbox"/> Priority</li> <li>III    <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV    <input type="checkbox"/> Lack of unity of invention</li> <li>V    <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI    <input type="checkbox"/> Certain documents cited</li> <li>VII    <input type="checkbox"/> Certain defects in the international application</li> <li>VIII    <input type="checkbox"/> Certain observations on the international application</li> </ul> |  |   |

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|--|---|
| Date of submission of the demand<br>07/05/2002   | Date of completion of this report<br>18.02.2003                             |
| Name and mailing address of the International preliminary examining authority:<br><br>European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 | Authorized officer<br><br>Naeslund, P<br><br>Telephone No. +49 89 2399 8614 |



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CA01/01550

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):  
**Description, pages:**

1-21 as originally filed

### Claims, No.:

7-13 as originally filed

1-6 as received on 14/11/2002 with letter of 12/11/2002

### Drawings, sheets:

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**I. INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

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- the description,        pages:  
 the claims,              Nos.:  
 the drawings,          sheets:

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

|                               |      |             |
|-------------------------------|------|-------------|
| Novelty (N)                   | Yes: | Claims 1-13 |
|                               | No:  | Claims NONE |
| Inventive step (IS)           | Yes: | Claims 1-13 |
|                               | No:  | Claims NONE |
| Industrial applicability (IA) | Yes: | Claims 1-13 |
|                               | No:  | Claims NONE |

2. Citations and explanations  
**see separate sheet**

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EXAMINATION REPORT - SEPARATE SHEET**

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Re Item V

*Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement*

1. The application relates to a process for the production of microcrystalline cellulose. None of the documents on file discloses all features of independent claim 1. Thus, Art. 33(2) PCT would appear fulfilled. The closest prior art is seen in WO-A-99/60027 (D1). This document teaches a process for producing microcrystalline cellulose (MCC) by subjecting the pulp to a hydrolysis and steam explosion. Claim 1 differs in substance by the cooling and depressurizing of the pulp by mixing it to water, and then extracting the pulp from the reactor without vaporisation of water. D1 makes no suggestion of this cooling step with water, which prevents random bursting of the pulp, nor does any other of the documents cited. In view thereof an inventive step can be acknowledged and the requirements of Art. 33(3) PCT would appear fulfilled.
2. With regard to the dependent claims 2-13, they concern preferred embodiments and would therefore also appear to fulfil the requirements of Art. 33(2) and Art. 33(3) PCT.
3. For the assessment of the present claims on the question whether they are industrially applicable, no particular reasoning would appear necessary to give. The industrial application would appear to be evident (Art. 33(4) PCT).
4. When entering the national/regional (e.g. EP)-phase a) SI- units should be applied throughout the application; see e.g. "psi", page 11, line 11; b) All cited prior art should be acknowledged in the description and c) The description should be adapted to the amended claims. Further, it is considered that step k) in claim 1 should be denoted j) (consecutive order).